

-- Description of the Related Art

1. R. N. Germain, D. H. Margulies, *Annu. Rev. Immunol.* 11, 403-450 (1993).  
P. Cresswell, *Annu. Rev. Immunol.* 12, 259-293 (1994a). P. R. Wolf, H. L. Ploegh, *Annu. Rev. Cell Dev. Biol.* 11, 267-306 (1995).
2. J. J. Neefjes, V. Stollorz, P. J. Peters, H. J. Geuze, H. L. Ploegh, *Cell* 61, 171-183 (1990).
3. P. J. Benaroch, et al., *EMBO J.* 14, 37-49 (1995).
4. P. A. Roche, P. Cresswell, *Proc. Natl. Acad. Sci. USA* 88, 3150-3154 (1991).
5. P. J. Peters, J. J. Neefjes, V. Oorschot, H. L. Ploegh, H. J. Geuze, *Nature (Lond.)* 349, 669-676 (1991).
6. J. M. Riberdy, R. R. Avva, H. J. Geuze, P. Cresswell, *J. Cell Biol.* 125, 1225-1237 (1994).
7. M. Kleijmeer, V. Oorschot, H. J. Geuze, *J. Invest. Dermatol.* 103, 516-523 (1994).
8. M. A. West, J. M. Lucocq, C. Watts, *Nature (Lond.)* 369, 147-151 (1994).
9. H. W. Nijman, et al., *J. Exp. Med.* 182, 163-174 (1995).
10. P. Peters, et al., *J. Exp. Med.* In press, (1995).
11. S. Amigorena, J. R. Drake, P. Webster, I. Mellman, *Nature (Lond.)* 369, 113-120 (1994).
12. C. V. Harding, H. J. Geuze, *J. Immunol.* 151, 3988-3998 (1993). A. Tulp, D. Verwoerd, B. Dobberstein, H. L. Ploegh, J. Pieters, *Nature (Lond.)* 369, 120-126 (1994). Y. Qiu, X. Xu, A. Wandinger-Ness, D. P. Dalke, S. K. Pierce, *J. Cell Biol.* 125, 595-605 (1994). A. Y. Rudensky, et al., *Immunity* 1, 585-594 (1994).
13. C. Harding, J. Heuser, P. Stahl, *Eur. J. Cell Biol.* 35, 256-263 (1994). B. T. Pan, K. Teng, C. Wu, M. Adam, R. M. Johnstone, *J. Cell Biol.* 101, 942-948 (1985).
15. R. N. Germain, L. R. Hendrix, *Nature (Lond.)* 353, 134-139 (1991). L. J. Stern, D. C. Wiley, *Cell* 68, 465-477 (1992).
16. W. Stoorvogel, H. J. Geuze, J. M. Griffith, A. L. Schwartz, G. J. Strous, *J. Cell Biol.* 108, 2137-2148 (1989).

17. J. J. Neefjes, H. L. Ploegh, *EMBO J.* 11, 411-416 (1992).
19. K. Guy, V. Van Heyningen, B. B. Cohen, D. L. Deane, C. M. Steel, *Eur. J. Immunol.* 12, 942-948 (1982).
20. B. van Deurs, P. K. Holm, L. Kayser, K. Sandvig, S. H. Hansen, *Eur. J. Cell Biol.* 61, 208-224 (1993).
21. T. H. M. Ottenhof, et al., *Nature (Lond.)* 319, 66-68 (1986). J. B. A. G. Haanen, et al., *J. Exp. Med.* 174, 583-592 (1991).
22. J.E.R. Thole, et al., *Microbial Pathogenesis* 4, 71-83 (1988).
26. P. Peters, H. J. Geuze, H. A. van der Donk, J. Borst, *Immunol. Today* 11, 28-32 (1990). P. J. Peters, et al., *J. Exp. Med.* 173, 1099-1109 (1991b).
27. D. Gray, M. Kosco, B. Stockinger, *Int. Immunol.* 3, 141-148 (1991).
28. S. G. Emerson, R. E. Cone, *J. Immunol.* 122, 892-899 (1979); D. H. Sachs, P. Kiskiss, K. J. Kim, *J. Immunol.* 124, 2130-2136 (1980); S. G. Emerson, R. E. Cone, *J. Immunol.* 127, 482-486 (1981).
29. C. V. Harding, H. J. Geuze, *J. Cell Biol.* 119, 531-542 (1992).
30. J. W. Slot, H. J. Geuze, S. Gigengack, G. E. Lienhard, D. James, *J. Cell Biol.* 113, 123-135 (1991). W. Liou, J. W. Slot, *Proc. Int. Conf. Electr. Microsc.* 13, 253-254 (1994).
31. S. R. Carlsson, J. Roth, F. Piller, M. Fukuda, *J. Biol.Chem.* 263, 18911 (1988).

#### Brief Description of the Drawings

##### Figure 1:

MIICs are exocytotic compartments. T2-DR3 cells were incubated in the presence of 5 nm BSAG for 10 min., washed, chased for 40 min. and processed for cryoultramicrotomy as described (30). Ultrathin cryosections were immunolabeled with a rabbit polyclonal anti-class II antibody (5) and antibody binding sites were visualized with protein A conjugated to gold (PAG with sizes in nm indicated on the figures). MHC class II labeling is present at the limiting membrane of the exocytotic profile and on the exosomes. The profile also contains